

REMARKS

By this response, Claims 21, 28, 37 and 38 have been amended, no claims have been added, and no claims have been deleted. Accordingly, Claims 21-25 and 27-38 are in the case.

The present invention is drawn to a system and method for controlling a device for heat setting a material as it is processed by a printing machine. Referring to exemplary Claim 21, the method includes the step of connecting a plurality of control modules operably together through a backplane, programming an application module for controlling the heat, receiving a power intensity value, and initiating a counter. The counter is then incremented by the power intensity value. In other words, the counter assumes a new value, which is the sum of the previous value of the counter, added to the power intensity value. That feature of the present invention allows the counter to be “stepped” in incremental values according to a variable amount; i.e., the power intensity value. When the power intensity value is greater, the counter will therefore be “stepped” to higher values more quickly. When the power intensity value is lesser, the counter will therefore be “stepped” to higher values more slowly.

The method next includes the step of comparing the counter and the base resolution, which, like the power intensity value, is another variable of the present system. The independent claims of the present application (Claims 21, 28, 37 and 38) have been amended to clarify the method of the present invention calls for *comparing* the counter and the base resolution and the use of modules in a programmable logic controller to control the heat applied to the textile. Even though the Examiner has cited new art, a *comparison* of the counter and the base resolution traverses the newly cited art.

The Examiner noted a *comparison* between the counter and the base resolution would be patentably distinct over the prior art; the independent claims, as now amended, still require a *comparison* between the counter and the base resolution. None of the newly cited art anticipates this feature when closely read against the amended claims as now amended. Therefore, the prior acknowledgement by the Examiner suggests the claims, as amended, are patentable over the newly cited prior art.

As will be demonstrated, the prior art cited by the Examiner in the December 7, 2006 Office Action does not disclose, anticipate or suggest the elements of the claims of the present application.

U.S. Patent No. 4,698,767 to Wensel et al. ("Wensel")

On page 2 of the December 7, 2006 Office Action, the Examiner rejected Claims 21-25 and 27 under § 102(b) as being anticipated by Wensel. Wensel is directed to an infrared dryer 21 for a paper printing press, which uses a series of carriers 13, each comprising one or more gripper bars 15 on a conveyor 11 to carry printed paper sheets 17 past the dryer. The controller 31 is a solid-state controller but that is where the similarities end between the Wensel reference and the claim invention. This is not a programmable logic controller with interconnected modules to control the heat applied to a screen-printing on a textile like a shirt. The power is not incremented over a time period as called for in claim. There simply is no claimed step function at all in Wensel. Moreover, there also is no step of incrementing by a power intensity value as found in claim 21. The site by the Examiner of column 4 line 41-61 on page 2 of the Office Action, simply describes a SCR control switches 55 being turned on and off by the sensing of the paper sheets 17 on the conveyor and by the operable condition of the cooling fans 27. Each count cycle in Wensel is tied to the passing of a physical carrier on the conveyor line. This obviously is not the same or even close to anticipating the method of claim 21.

In addition, Wensel does not disclose two elements of Claim 21 of the present application. First, Wensel does not disclose the step of incrementing the counter by the power intensity value. Wensel teaches maintaining a power control signal at a high level when a paper sheet 17 is present and at a low level when there is an absence of a paper sheet 17. But Wensel does not disclose using a counter for that purpose. Moreover, Wensel does not disclose or suggest a counter incremented by the power intensity value. The present invention includes that feature so as to enable the counter to be stepped, i.e., incremented, at a variable rate. Wensel simply includes no feature remotely comparable to a counter incremented by a power intensity value.

Further, Wensel does not disclose the step of comparing the counter with a base resolution. Wensel teaches the power output signal is increased to a preset high setting in response to a paper sheet sensed on the conveyor and is decreased in response to the absence of a paper sheet on the conveyor. That is not the same as comparing the counter of the present invention with the base resolution, for the purpose of determining whether to generate a power intensity output signal. In fact, Wensel does not teach or suggest any comparison involving a true counter at all.

Wensel fails to disclose the steps of incrementing the counter by the power intensity value and comparing the counter with the base resolution. For at least these reasons, Claim 21 is patentable over Wensel. Claims 22-25 and 27 are dependent on Claim 21, and are therefore patentable over Wensel for the same reasons.

U.S. Patent No. 4,698,767 to Toskala. ("Toskala")

On page 3 of the December 7, 2006 Office Action, the Examiner rejected Claims 28-36 under § 102(b) as being anticipated by Toskala. Toskala is directed to a universal mobile telecommunication system to solve a possible interference condition in a downlink dedicated channel from interference on that channel to a base station transceiver. The independent claims as now amended each call for heating setting of material on a textile during a printing machine process and are obviously patentably distinguishable over this reference. The Toskala system operates on a wireless signal between a mobile unit and its base station over the airwaves. There is simply nothing anticipated by the teaching of Toskala with regard to control the heat during the drying of the ink material on a textile as called for in the now amended independent claims 21, 28, 37 and 38.

Like Wensel, however, Toskala fails to disclose a number of elements of the present claimed invention in claims 28-38. Independent claim 28 calls for the power intensity signal to generate the heat setting of the device. Independent claim 37 calls for a temperature selector, a lamp selector and a base resolution selector modules. Neither Wensel nor Toskala have any of these elements and therefore, the cited references lack the elements necessary to be an anticipation of the claimed invention.

In addition, the step of incrementing the counter by the power intensity value, and the step of comparing the counter to the base resolution is simply not found in these cited references of Wensel and Toskala. The present invention provides that a counter is initialized, and is then *incremented by the power intensity value*. Toskala, in contrast, discloses a dual counter threshold levels 146 and 147 in column 9 lines 27-59 with the attendant function expected of signal transmission over the airwaves between a mobile unit and its base station transceiver. This counting and threshold settings have nothing to do with control the ink being dried on a textile but would do everything to assure it scorched the ink or damaged the textile during its drying process. Toskala thus fails to teach the step of incrementing the counter by the power intensity value, which is a limitation of Independent Claims 28, 37 and 38 of the present application. Applicants therefore respectfully submit Claims 28, 37 and 38 are patentable over Toskala.

Claims 29-36 are dependent on Claim 28, and include its limitations. Therefore, Applicants submit Claims 29-36 are patentable over Toskala for the same reasons.

U.S. Patent No. 5,908,000 to Spychalla et al. ("Spychalla")

On page 4 of the December 7, 2006 Office Action, the Examiner rejected Claims 37 and 38 under §102(b) as being anticipated by Spychalla. Spychalla is directed to a heat curing system for silk screen printing press, which has an electric resistance heating station to cure silk screen printed ink on a substrate like a textile. This system allegedly is monitoring and controlling the operation of a high intensity discharge lamp. An infrared sensor 27 senses the temperature of the ink printed on the substrate 30. However, infrared sensors are subject to contaminants and must have a positive airflow across the face of the sensor to keep it at a low temperature or otherwise it will become damaged and useless. The timer 150 in column 8, lines 28 through 65 is a simple countdown timer powered up with the system and counts down and shuts off the power by tripping a control relay to the quartz lamps on a set time interval.

Spychalla does not disclose at least two elements of Claims 37 and 38 of the present application. First, Spychalla does not disclose the step of incrementing a counter by the power intensity value. Spychalla teaches a countdown timer preset to run when power is first applied to

the overall system. It slavishly counts down with regard to power being present and then trips a control relay shutting off the power. Spychalla does not have a base resolution setting or any other outputting of a signal to effect a variation in a sensed parameter. Spychalla simply does not disclose using a counter for such purpose. Moreover, Spychalla does not disclose or suggest a counter incremented by the power intensity value. The present invention includes that feature so as to enable the counter to be stepped, i.e., incremented, at a variable rate. Spychalla simply includes no feature remotely comparable to a counter incremented by a power intensity value. Spychalla is stuck in the prior art of using a countdown timer without modification of a sensed parameter or a comparison to a base resolution as called for in claims 37 and 38

Second, Spychalla does not disclose the step of comparing a counter with a base resolution. Spychalla teaches a controller with a number of old electro-mechanical relays can be used to respond to a temperature parameter signal from an infrared detector in order to effect a variation in that parameter. This is simply not the same as comparing the counter of the present invention with the base resolution, for the purpose of determining whether to generate a power intensity output signal. In fact, Spychalla does not teach or suggest any comparison involving a counter or even its timer at all. Spychalla thus fails to disclose both the step of incrementing the counter by the power intensity value, and comparing the counter to the base resolution. Applicants therefore respectfully submit Claims 37 and 38 are patentable over Spychalla.

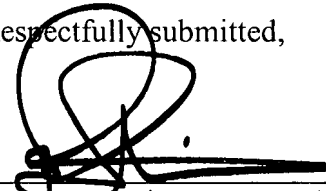
In light of the arguments above, it is believed all of the independent Claims and the claims that depend therefrom patentably distinguish over the cited references. All of the pending Claims are believed to be in condition for allowance and an action to this end is earnestly requested. If it would expedite the progress of this Application through the examination process, the Examiner is authorized to call the undersigned attorney.

The Examiner and Commissioner are hereby authorized to charge any additional fees associated with this Response or refund any overpayments associated with this Response to our deposit account, Deposit Account No. 50-2803.

Respectfully submitted,

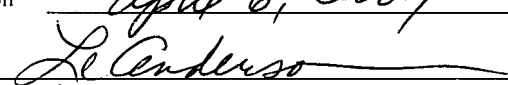
Dated: 6 April 2007

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